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THE SO-CALLED RETICULOHISTIOCYTOMA OF THE SKIN.

A COMPARISON OF TWO DISTINCT TYPES.

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IN 1936, Parkes Weber and Freudenthal (Weber and Freudenthal, 1937) showed a patient at the Section of Dermatology of the Royal Society of Medicine who had symptoms of rheumatoid arthritis and hard reddish brown juxta-articular nodules, averaging the size of a split pea, on the backs of the fingers and numerous much smaller yellowish red semi-translucent firm papules on the face, especially around the lips and nostrils and around the pinnae. There were no radiological changes and no blood disturbance, except that the serum cholesterol and uric acid were both slightly raised at 350 mg. % and 3.7 mg. % respectively. Histologically the nodules showed a striking picture. Beneath a thinned but otherwise normal epidermis there was a well-circumscribed mass of densely packed fibrous connective tissue, embedded in which were many large multinucleated giant cells of varying size and shape with large pale nuclei and dark nucleoli. The cells did not stain for nerve elements. Overt fat was not demonstrable, but as the cytoplasm took on a faint rosy hue with Sudan III they were considered to be "pre-xanthoma cells" and the case was put on record under the title "Nodular Non-diabetic Cutaneous Xanthomatosis with Hypercholesterolaemia." On a low fat diet the lesions gradually involuted over a period of four years but the arthritis remained troublesome.

In 1943, Parkes Weber, in an article in this journal entitled "Cutaneous and Subcutaneous Nodules with Juxta-articular Infiltrations and Rheumatoid Symptoms", referred to this and to two similar cases and stated that the nodules and infiltrations were much more numerous than those occasionally seen in ordinary rheumatoid arthritis and that hypercholesterolaemia was not an essential part of the syndrome. He observed: "I cannot help thinking that the xanthomatous infiltrations in these little known cases may have a relation to the rheumatoid arthritis analogous to that which gouty tophaceous deposits sometimes appear to have to osteoarthritis with exaggerated Heberden's nodes."

Fletcher (1946) described a case of rheumatoid arthritis with many asymmetrical juxta-articular nodules but where the face and ears were unaffected, the blood chemistry was normal, the ESR repeatedly raised and the histological picture that of a typical rheumatoid arthritis nodule surrounded by inflammatory and foam cells with many multinucleated giant cells, the whole containing intra- and extra-cellular cholesterol.

Graham and Stansfeld (1946) recorded another case of progressive deforming rheumatoid polyarthritis with nodules on the face, scalp, fingers, elbows and wrists and a raised serum uric acid. Death was due to an anaplastic sarcoma and at post-mortem the skin and mesodermal tissues were infiltrated with xanthoma-like cells, but there was little or no reticulo-endothelial reaction.

In a clinical and histological examination of twenty-seven cases of rheumatic disease with nodules, Kersley *et al.* (1946) recognized this rare group with cholesterol deposition and foam cell formation, and observed that this also occurred in the later stages of rheumatoid arthritis associated with hypothyroidism and also in occasional cases of gout (as described by Chauffard and Troisier, 1921).

In America, Montgomery and O'Leary (1934) had described a case of multiple ganglioneuroma where the nodules, occurring in a fit person and involuting spontaneously, also showed bizarre multinucleated giant cells embedded in connective tissue, but where stains for nerve fibrils and Nissl bodies were positive. The first case in the literature of the American continent which in any way resembled that of Weber and Freudenthal was described in Brazil by Portugal *et al.* (1944) under the title of "Generalized Giant Cell Histiocytomatosis."

Allen (1948) in his survey of skin pathology as seen in World War II discovered two similar cases for which he coined the name "reticulohistiocytoma." Zak (1950) described four cases of solitary lesions in healthy people, three of which he regarded as identical with the multiple ganglioneuroma of Montgomery and O'Leary, and the fourth as a post-traumatic granulomatous process similar to that following insect bites. Having studied Allen's sections he retained the name reticulohistiocytoma for his solitary lesions "in order to emphasize the difference from the ordinary histiocytoma of the skin." Nevertheless, Caro and Senear (1952) in reporting two cases clinically and histologi-

cally similar to Weber's original case, and apparently unaware of the relevant European literature and of the Brazilian case of 1944, adopted the name reticulohistiocytoma because vital staining with colloidal iron gave a reaction indicative of reticulohistiocytic activity.

Allington had previously (1950) described yet another similar case where the nodules were thought to be giant cell tumours of tendon sheath origin, and in this country Evans and Warin (1953) showed two further cases at the International Congress of Dermatology and suggested that the histological picture resembled that of the solitary tumour known as granular cell myoblastoma. Recently Goltz and Laymon (1954) reviewed the literature, added two more cases and emphasized the systemic nature of the condition by demonstrating the typical histology in the synovial membrane of an affected joint. They considered it a granulomatous rather than a neoplastic process, not definitely related to reticulum cells or fibres, but used the name "reticulohistiocytosis" to establish connection with cases previously recorded. They apparently regarded the solitary lesions which Zak described and the ganglioneuroma of Montgomery and O'Leary as atypical variants of the one basic condition.

Purvis and Helwig (1954) have reviewed the subject from the clinical histories and the pathological material from these types of case available in the files of the Armed Forces Institute of Pathology. They found forty-four cases, four of which were those previously reported by Zak. Details of the cases were not given, but in only four were there multiple nodules of generalized distribution. Finally McCash and Richards (1954) have described a solitary reticulohistiocytoma similar to those recorded by Zak arising in the margin of a skin graft.

We have recently had the opportunity of examining two cases, one of which was clinically and pathologically similar to the cases of Parkes Weber and Freudenthal and of Caro and Senear, and the other to the cases of Zak and of McCash and Richards.

CASE REPORTS.

CASE 1.—A woman aged 47 years. First seen September 1952 with a four months' history of generalized "rheumatism" and a skin eruption on the fingers, face, neck and scalp. General health undisturbed.

On examination arthritis of rheumatoid type chiefly of the hands and knees with swelling and limitation of movement. On the backs and sides of the fingers were scattered brownish-yellow dermal nodules up to 3 or 4 mm. in diameter, dome-shaped at first, older lesions becoming flat topped and covered with atrophic epidermis. The complexion was florid with a persistent erythema in the V of the neck; on the sides of the neck, along the scalp margin, around the ears and on the pinnae were numerous small shiny yellowish dome-shaped papules with a tendency to grouping.

Sections taken from the nodules showed well-circumscribed but unencapsulated lesions consisting of numerous multinucleate giant cells (diameter up to approximately 80μ) which were morphologically similar to the usual foreign body giant cell. The

cytoplasm of these cells was abundant, eosinophilic, and faintly reticular in appearance. It stained diffusely with Sudan IV and Sudan Black, without granules. The nuclei each measured approximately 10μ in diameter; they were scattered irregularly in the cell and varied in number up to about twenty. They had well-defined nuclear membranes and small but prominent solitary nucleoli. These giant cells were embedded in a fairly abundant fibrous stroma with numerous round cells, histiocytes and fibroblasts. Stains for nerve fibrils and Nissl's granules were negative. The overlying epidermis was thinned but intact (Fig. 1).

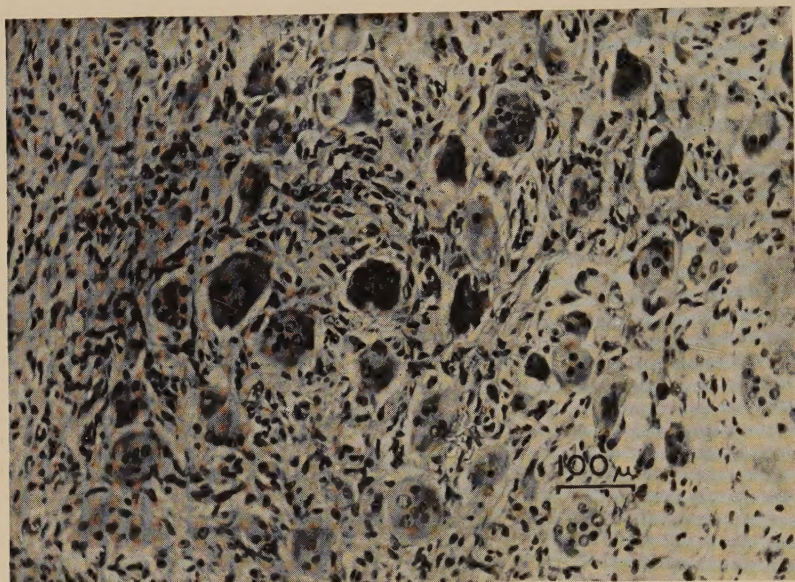


FIG. 1.—Case 1. Numerous multinucleated giant cells embedded in a fibrous stroma with round cells, histiocytes and fibroblasts.

Skiagrams: Hands and feet—general osteoporosis, a few localized phalangeal erosions. Chest—normal.

Blood count, sternal marrow and ESR normal. Serum calcium, phosphorus, alkaline phosphatase, uric acid and cholesterol—normal.

Liver function tests normal. Plasma proteins 7.75 g. % (albumin 5 g. %, globulin 2.75 g. % with a relative increase in gamma globulin on electrophoresis). Heterophil antibodies—nil. Direct Coombs test—negative.

The biochemical analyses have been repeated three times at six-monthly intervals, the only deviation from normal being a raised serum uric acid on two occasions (3.8 and 4.1 mg. %).

Treatment and Course.—Treatment seems to have little influenced the course of the condition. Salicylates, arsenic and calciferol internally have been combined with physiotherapy (wax baths and exercises) and deep x-ray therapy to the joints. In July 1954 a course of cortisone was given in standard dosage to a total of 3 g. over five weeks with no appreciable benefit either to the joints or to the skin lesions.

During the two years the small papules on the face, scalp and ears have gradually retrogressed and are now minimal. Some of the large nodules on the hands have become smaller, but a few more have formed.

There has been a slow but definite worsening of the arthritis with more stiffness and deformity, especially of the hands, and this is reflected in the radiographic appearances which show arthritic changes maximal in the hands and wrists and of moderate severity in the knees and shoulders, the ankles being unaffected. In spite of this the general health has remained good and the ESR normal.

CASE 2.—A woman aged 70 years was first seen in February 1953 with a six months' history of a gradually enlarging tumour arising from the skin of the right breast.

She had had a flat brown birthmark on the skin of the inner and upper quadrant of the right breast which she had scratched six months before her admission to hospital. It bled and then became red and swollen and gradually developed into a polypoid strawberry-shaped mass, with an infected ulcerated upper surface upon which a crust formed. The tumour was not painful.

On examination.—The tumour was soft and not tender. It was not attached to the deeper structures. One moderately enlarged lymph node was palpable in the right axilla. The nipple was normal, as was the left breast. No other tumour masses could be found.

In addition the patient had a moderate degree of osteoarthritis in both knees, but there was no arthritis of rheumatoid type. She had longstanding chronic bronchitis and emphysema, calcific disease of the aortic valve with stenosis, auricular fibrillation and essential hypertension (B.P. 210/120), with consequent episodes of heart failure.

On 5 March 1953 the tumour was removed under local anaesthesia, and there was no recurrence six months later.

The specimen consisted of a rounded tumour measuring approximately $3 \times 3 \times 3.5$ cm. attached by a very short pedicle, 1.5 cm. in diameter, to an ellipse of skin. The greater part of the upper part of the free surface was ulcerated, infected and covered with a crust, which was dark in colour. The remainder was covered with epidermis. The cut surface of the tumour was fleshy and pinkish-white and sharply delineated from the underlying subcutaneous tissues, which it was not infiltrating. The part of the tumour immediately beneath the ulcerated surface was deeply stained with blood pigment.

Histological examination showed the tumour to be made up of very large (diameter up to about 120μ), multipolar, often multinucleated cells, with an abundant cytoplasm having a pale ground-glass appearance in which occasional rounded, pale or faintly basophilic vacuoles were present. The cytoplasm also contained numerous droplets of fat. Some of these cells contained phagocytosed polymorphonuclear leucocytes. The cell nuclei were extremely large and varied considerably in size (diameter up to approximately 40μ), with a network of granular chromatin, and were often vesicular. Very large nucleoli were present (Fig. 2).

Between the large cells were great numbers of inflammatory cells of all types, and the upper part of the tumour was grossly infected with extensive necrosis. No fibrous tissue was present. Stains for nerve fibrils and Nissl's granules were negative.

The histological appearances in this case are identical with those described by Zak (1950) and the lesion appears to be a peculiar granulomatous reaction of the skin to infection or irritation. It was arising in the skin and does not appear to be related to the giant-celled tumours of breast (Engelbreth-Holm, 1940; Fry, 1927).

Currie (1954), in a communication to the Pathological Society of Great Britain and Northern Ireland, described a peculiar granulomatous reaction in the base of simple melanomata, the result of infection, which had some features in common with the present case. In the case of McCash and Richards there was also a history of "a small mole" at the site of the tumour three years before it was excised and it is possible that the presence of a previous naevus in our case was a factor in the development of the lesion.

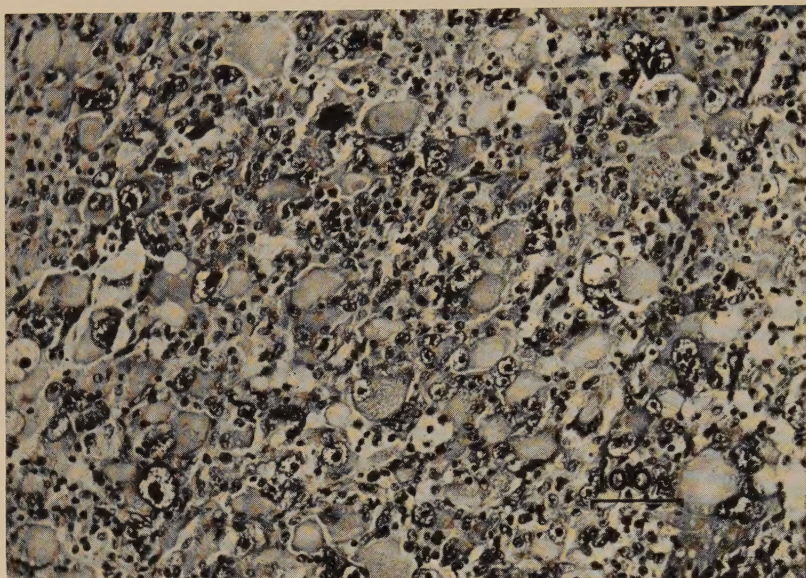


FIG. 2.—Case 2. Numerous giant cells only some of which are multinucleated. Very large nuclei with very prominent nucleoli. Inflammatory stroma without collagen.

PATHOLOGY.

The histological appearances of the lesions from the two cases show several similarities, but there are also considerable differences.

In Case 1 there is much fibrous stroma between the giant cells, but scanty inflammatory reaction. The giant cells are similar in appearance to foreign body giant cells with numerous uniformly sized and shaped nuclei, but no cytoplasmic vacuolation and the cytoplasm, staining faintly and diffusely with Sudan IV and Sudan Black, probably contains only submicroscopic droplets of fat. In Case 2 there is no fibrous stroma between the giant cells (although fibrous tissue was described in the otherwise similar specimens of McCash and Richards and Case 4 of Zak), but there is a marked polymorphonuclear inflammatory infiltrate. The giant cells are more numerous, larger, and contain fewer but much larger nuclei and nucleoli, and there is cytoplasmic vacuolation. The cytoplasm, moreover, contains numerous fairly large droplets of fat.

The histological appearances and the clinical history of Case 2 are those of a solitary atypical inflammatory granuloma, and the case of McCash and Richards, and Case 4 of Zak's series are probably similar. Zak's first three specimens were from men's faces and could also have been inflammatory in origin. Our Case 1 on the other hand shows much less inflammatory reaction; it has much more in common histologically with other types of xanthomata, and is also a generalized systemic disorder.

NOMENCLATURE.

This communication aims primarily at pointing out that various authors have not only used a common title—reticulohistiocytoma—for two different conditions, but have also erroneously implied that the processes are neoplastic. Goltz and Laymon have shown that the so-called reticulohistiocytoma of Caro and Senear is in fact a systematized disorder of small xanthomatous giant cell granulomata in the skin and synovial membranes. They suggested the term multicentric reticulohistiocytosis of skin and synovia, although they were somewhat disturbed at having to include the prefix “reticulo-”, since there was no conclusive evidence that reticulum cells or fibres participated in the formation of these tumours. The inclusion of the term was justified in establishing the connection between their cases and those previously described. We agree that their title is the most satisfactory of those used in the past.

The so-called reticulohistiocytoma of Zak is clearly a granuloma, so that the name reticulohistiocytic granuloma suggested by Montgomery and O’Leary is appropriate.

We wish to thank Dr. B. C. Tate and Mr. B. T. Rose for permission to make use of their clinical records of the cases, and Professor J. W. Orr for his helpful advice and criticism in the preparation of this article.

REFERENCES.

- ALLEN, A. C. (1948) *Arch. Derm. Syph., Chicago*, **57**, 19.
 ALLINGTON, H. V. (1950) *Ibid.*, **62**, 452.
 CARO, M. R. and SENEAR, F. E. (1952) *Ibid.*, **65**, 701.
 CHAUFFARD, A. and TROISIER, J. (1921) *Ann. Méd.* **9**, 149.
 CURRIE, A. R. (1955) *Glasgow med. J.*, **36**, 111.
 ENGELBRETH-HOLM, J. (1940) *Acta path. microbiol. scand.*, **17**, 506.
 EVANS, C. D. and WARIN, R. P. (1953) Proceedings of the Tenth International Congress of Dermatology London 1952. London: British Medical Association, p. 511.
 FLETCHER, E. (1946) *Ann. rheum. Dis.*, **5**, 88.
 FRY, H. J. B. (1927) *J. Path. Bact.*, **30**, 529.
 GOLTZ, R. W. and LAYMON, C. W. (1954) *Arch. Derm. Syph., Chicago*, **69**, 717.
 GRAHAM, G. and STANSFELD, A. G. (1946) *J. Path. Bact.*, **58**, 545.
 KERSLEY, G. D., GIBSON, H. J. and DESMARAIS, M. H. L. (1946) *Ann. rheum. Dis.*, **5**, 141.
 McCASH, C. R. and RICHARDS, H. G. H. (1954) *J. Path. Bact.*, **67**, 419.
 MONTGOMERY, H. and O’LEARY, P. A. (1934) *Arch. Derm. Syph., Chicago*, **29**, 26.
 PORTUGAL, H., FIALHO, F. and MILIANO, A. (1944) *Rev. argent. Dermat.-sif.*, **28**, 121.
 PURVIS, III, W. E. and HELWIG, E. B. (1954) *Amer. J. clin. Path.*, **24**, 1005.
 WEBER, F. PARKES and FREUDENTHAL, W. (1937) *Proc. R. Soc. Med. Sect. Derm.*, **30**, 522.
 WEBER, F. PARKES (1943) *Brit. J. Derm.*, **55**, 1.
 ZAK, F. G. (1950) *Brit. J. Derm.*, **62**, 351.

THE NATURE OF COLLOID MILIUM.

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COLLOID MILIUM is a rare affection of the skin. Ferreira-Marques and van Uden found in 1950 in the literature the description of 60 cases; Prakken described in 1951 his own case and culled another three from the literature.

Colloid milium occurs only on the uncovered parts of the skin, and exclusively in those who are very much exposed to the sun. This circumstance is noted as the explanation of the fact that the disorder is more often observed in the sunny south of Europe than in our temperate zones. The affection consists of orange-yellowish translucent elevations of the skin as small as a pin's head, closely aggregated and occurring chiefly over the zygomatic arches and temples and on the backs of the hands. Extension of the eruption takes place only in summer, and is sometimes accompanied by a slight itching and swelling if the affected parts of the skin are exposed to strong sunlight.

On superficial inspection the primary lesions give the impression of being vesicles; but as they are not cavities filled with a clear fluid, they do not deserve this name.

By pricking with a sharp needle into the epidermis and by pressing slightly with a comedo extractor around the puncture prick, it is not difficult to obtain a yellowish gelatinous substance. It sometimes happens that during this procedure, but as a rule immediately afterwards, small haemorrhages appear in the cutis, which extend into the tissues immediately around.

Each publication mentions these "colloid masses", which are situated in the upper half or one-third of the cutis. Superficially, the gelatinous mass is separated from the epidermis by a narrow band of almost normal-looking connective tissue; in the connective tissue lying deep to the colloid mass changes can be perceived.

Opinions about the nature and origin of the gelatinous substance still differ a great deal. Wagner (1866) took it for a degeneration product of the sebaceous glands, but nobody has since favoured this view. Nowadays the "colloid" is generally believed to be a degeneration product of certain elements of connective tissue, but from which component it originates is still a matter of debate. Some see it as a degeneration product of collagen, others believe it to be an elastin derivative, while a third group of investigators regard it as originating from both tissues. Thus Ferreira-Marques and van Uden argue its origin from

elastin ; Prakken sees the collagen as the principle source of the colloid, though he will not fully exclude elastin as the precursor. These opinions are chiefly based on histological evidence.

Ferreira-Marques and van Uden are at the same time inclined to consider the possibility of the colloid being formed from substances deposited via the blood or lymph stream if the origin from connective tissue proves unacceptable.

Percival and Duthie (1948) report no alteration of the collagen and only slight changes in the elastin. They suggest that, like for instance, amyloid the colloid might be deposited *in situ* in a similar fashion to the deposition of amyloid. In support of this they point out (i) that they could nowhere under the microscope see any transition of collagen or elastin into the colloid mass ; (ii) that colloid milium occurs in young people, who upon microscopic investigation completely lack any sign of degeneration of connective tissue ; and (iii) that in fresh lesions the colloid is to be found exclusively in the summits of the papillae, around the capillaries.

It is our belief that this problem has not been solved by histological examination. Bergamasco in 1940 tackled the question by another method. He treated histological sections with trypsin and observed total digestion both of colloid and elastin ; he concluded from this that the colloid was derived from elastin. But this conclusion is not justified since it is now known that the elastin is not digested by the trypsin itself, but by the elastase, another ferment, usually present in trypsin preparations.

Findlay (1954) repeated Bergamasco's experiment and used raw pancreatin as elastase. He perceived that the colloid as well as the elastin were eaten away, and this led him to the same conclusion as Bergamasco. There is no justification in accepting the relation between elastin and colloid on those grounds, since Findlay was not working with pure elastase and because trypsin, undoubtedly present in his preparation, can digest various proteins.

We have tried to approach this problem by comparing colloid from the affected skin with collagen, elastin and blood plasma by paper chromatography.

CASE REPORTS.

CASE 1.—A man, 45 years old (Zoon, 1953) who, being a navy, is much exposed to the sun. About five years ago he observed the skin under both eyes turning a yellowish colour. After a year or so the skin in this area became slightly swollen ; during the following summer this gradually extended, and the lesions became slightly painful, especially after being exposed to the sun. The affection is now localized in the region of the zygomatic arches and on the radial parts of the backs of the hands ; its colour is orange-yellow and looks, at close inspection, like a yellowish orange.

Investigations.—Blood: Hb 95% ; R.B.C. 5,200,000 ; W.B.C. 8600 (basos. 2% ; eos. 4% ; stabs. 3% ; lymphos. 28% ; polys. 60% ; monos. 3%). E.S.R. : 5-15. Kline test : negative. Serum cholesterol 180 (esters 59%). Serum vit C content, normal.

Urine : Normal.

von Pirquet's reaction : Negative with bovine and human tuberculin.
The erythema threshold after irradiation with ultra-violet light is normal.

CASE 2.—A man, 33 years old, is otherwise in good general condition. He does much outdoor work, coming into contact with tarred railway sleepers. He came to the clinic because of severe sunburn. It had struck him already in former summers that he was easily sun-burnt, his skin peeling during the whole summer ; sometimes he even had crusts on his face. But he had not observed that the skin near his eyes had a yellow colour.

On examination the same appearances as in Case 1 were seen on the bridge of the nose, on both zygomatic areas and at the outer canthi of the eyelids.

Neither he nor anyone in his family ever had other than the common diseases. His father's family all had red hair, and one brother had white hair since birth.

General physical examination was normal.

Histology (both cases).—Beneath the thinned epidermis "colloid" masses can be observed in the stratum papillare, divided by vertical gaps into separate fragments. In numerous gaps erythrocytes are seen, most of which are lying in the tissues ; we attribute these to vessels damaged by the excision. The undermost part of the stratum reticulare looks to be normal ; more to the surface thick weakly basophil filaments can be seen among apparently normal collagen. Those filaments give the impression of swollen elastin fibres and are partly fragmented. They are very numerous immediately next to the colloid masses and normal collagen fibres are very scarce here. The cutis in this region is almost entirely made up of whorls of such altered elastin-like fibres. With orcein it also appears that these fibres stain like elastin. In the narrow layer of connective tissue between the epidermis and the colloid the same changes exist. In the haematoxylin-eosin section one gets the impression that a complete transition exists between the altered slightly basophil elastin fibres and the eosinophil colloid. The orcein stain shows, however, that the red-brown elastin can be clearly distinguished from the light violet colloid. It now no longer gives the impression that the colloid substance and the surrounding altered connective tissue become merged. Close beneath and especially at both sides of the colloid mass a considerable number of cells can be seen. At first glance these look like connective tissue cells, but on closer examination many of them appear to be swollen endothelial cells of the much dilated capillaries. These capillaries can, in a number of places, be pursued into the colloid. Their structure is abnormal ; they appear to be rigid with thickened walls, absorbing the dye at some places in the same way as the colloid (Figs. 1 and 2).

From the microscopic picture it seems possible that the disease might begin primarily with these clearly visible changes in the walls of the blood vessels, which might be responsible for the diffusion of the blood proteins. Sunlight might affect these changes. The proteins, after having left the vessels, might then pass between the connective tissue bundles and push them apart. According to this supposition the colloid would originate from the blood proteins.

In the earlier descriptions of colloid milium, changes of the blood vessels have already been mentioned : Ferreira-Marques and van Uden report telangiectases and regard them, and the tissue haemorrhages, as the result of the diminution of the elastin ; they also mention the swollen endothelium of many capillaries. Prakken also describes dilatation of the blood vessels.

We therefore tried to find support for the supposition that the colloid might



FIG. 1.— $\times 120$.

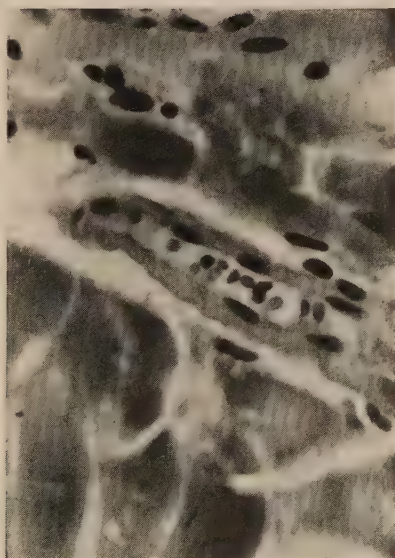


FIG. 2.— $\times 430$.

be a derivative of blood proteins. To this end we pressed colloid out of the cutis of both our patients with the utmost care, using for our study only samples in which no blood could be detected macroscopically.

Our next task was to make a differentiation between collagen, elastin and any other proteins. The quantity of material thus obtained was too small for extensive physico-chemical investigations, but it was possible to identify the amino-acids present by means of two-dimensional paper chromatography.

The colloid, therefore, was hydrolysed with 6N hydrochloric acid for 8 hours at 100° C. After removal of the hydrochloric acid, a quantity of hydrolysate containing about 8–12 γ (1 γ = 10⁻⁶ g.) nitrogen (equivalent to about 50–70 γ protein) was placed on the corner of a sheet of filter paper and was chromatographed twice in the usual way with butanol-acetic acid-water and with phenol-water mixtures. By comparing chromatograms of hydrolysates of blood serum, collagen (gelatine) and elastin, we obtained the results shown in Table I. It is of particular interest to note that—

(i) in the colloid hydroxyproline* is absent. This amino acid is plentiful in collagen and also to a less extent in elastin, but is almost absent from serum.

(Collagen gave 14% hydroxyproline, elastin 1.5%, colloid, less than 0.5%, and serum, less than 0.5%.)

(ii) The amino-acids alanine and glycine are found abundantly in elastin and collagen, but to a trifling extent in colloid and serum.

(iii) Arginine, aspartic acid, lysine, threonine, tyrosine and glutamic acid are present in the colloid and in serum. The five first named of these are absent from elastin and from collagen; glutamic acid is not present in elastin.

TABLE I.

	Collagen.	Elastin.	Serum.	Colloid.
Alanine	++	++	+	+
Arginine	—	—	+	+
Aspartic acid	—	—	+	+
Glycine	++	++	+	+
Glutamic acid	+	—	+	+
Hydroxyproline	++	±	—	—
Isoleucine }	+	++	+	+
Leucine }	—	—	+	+
Lysine	—	—	+	+
Phenylalanine	+	—	+	+
Proline	++	+	+	+
Threonine	—	—	+	+
Tyrosine	—	—	+	+
Valine	—	++	+	+

The amino-acid composition of collagen and elastin is so characteristic that these findings lead without the slightest doubt to the conclusion that the colloid does not originate from these proteins. The similarity between the amino-acid

* Hydroxyproline was determined in the hydrolysates according to the method of Neuman and Logan (1950).

content of serum and colloid is an important indication in favour of the supposition that the colloid originates from serum. The results of histological examination, and the arguments of Percival and Duthie mentioned above, give further support to this supposition.

SUMMARY.

A two-dimensial chromatographic study leads to the conclusion that the so-called colloid present in the cutis in colloid milium originates almost certainly from serum proteins. Histological study of the cutaneous blood vessels supports this theory.

REFERENCES.

- FERREIRA-MARQUES, J. and van Uden, N. (1950) *Arch. Derm. Syph., Berl.*, **192**, 2.
PRAKKEEN, J. R. (1951) *Acta dermat.-venereol., Stockh.*, **31**, 713.
WAGNER, E. (1866) *Arch. Heilk.*, **7**, 463.
PERCIVAL, G. H. and DUTHIE, D. A. (1948) *Brit. J. Derm.*, **60**, 399.
BERGAMASCO, A. (1940) *Arch. ital. Derm.*, **16**, 465.
FINDLAY, G. H. (1954) *Brit. J. Derm.*, **66**, 16.
ZON, J. J. (1953) *Ned. Tijdschr. Geneesk.*, **97**, 1294.
NEUMAN, R. E. and LOGAN, M. A. (1950) *J. biol. Chem.*, **184**, 299.¹
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KAPOSI'S IDIOPATHIC HAEMORRHAGIC SARCOMA : A CASE IN A HINDU.

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CASE REPORT.

A HINDU woman at the age of 26 and the mother of two children—aged 7 and 5—got the first attack of the disease in February 1944. She first developed tiny papular, itchy eruptions with thick, serous discharge on the scalp over the vertex and frontal regions, around the umbilicus and over the genital region extending up to the symphysis pubis. She had some treatment from her family physician with no effect.

She then consulted the author when lesions at the above sites showed as small soft nodules with gaping hair follicles over the hairy parts. They were oedematous and on pressure exuded a thick, serous fluid and were slightly painful. They looked like patches of kerion, but the hairs on examination did not reveal any fungus. The condition was treated with hot boric compresses and local application of 1% silver nitrate solution. Treatment was continued for two weeks but the condition did not improve very much. The patient was then lost sight of.

Eight years later, in December 1952, she was brought to the author once more for treatment. She said that in April 1944 she had a marked aggravation of the condition. She developed nodular lesions about one-half to one centimetre in diameter; they united and formed plaques and some of them became pustular. The nodules covered practically the whole body and they were painful and itchy; some had turned red or reddish brown in colour. The whole body became oedematous. She was treated with autogenous vaccines (culture showed the presence of *Streptococcus viridans* and *Staph. aureus*), vitamins and a few doses of superficial x-rays (details not available). No diagnosis was given by the physician who was then treating her. The skin condition did not improve at all.

She then consulted a homeopath and kept herself under his treatment for 3 months (May to July 1944) during which period there was further aggravation of the disease. Nodules on the axillae, inguinal regions and vulva turned into vegetative growths, and she consulted another dermatologist who treated her with acriflavine wash, silver nitrate applications and ointments containing ammoniated mercury and salicylic acid. This resulted in a marked improvement, but for a short while. There was relapse with small vesicles at the margins of the old lesions and a rise of temperature up to 100°. At this time she had three injections of antypol within a week and was found to be intolerant to the drug. The nodules became more painful and she was unable to move about. Then she was given sulphathiazole and sulphadiazine orally and parenterally but with no improvement. Sulphapyridine was then tried, first with a few injections and then orally, 2-3 g. a day. There was a quite satisfactory turn and the drug was continued for 4 years, up to 1948.

During this period she had several milder relapses, and sulphapyridine did not give the same good results when repeated. During the period of 4 years the lesions appeared at different sites on the abdomen, thighs, legs, breast, neck and genital regions. At this time pemphigus vegetans was diagnosed by the treating physician. In the beginning of 1948 when she had great improvement of the condition, she conceived but in the later months of pregnancy there was a bad exacerbation. The

physician who had treated her for these years died about this time, so she had to consult another dermatologist who treated lesions in the inguinal regions and vulva with superficial x-rays (100 kV., 5 Ma, 25 F.S.D.). Al filter—two fields inguinal and vulval, 100–150 r per field every week. Total dosage: inguinal field, 1250 r and vulval field, 850 r. In the later stages of pregnancy the treatment had to be stopped. She gave birth to a healthy child in September 1948. After childbirth her condition improved.

Six months later (July 1949) she had another fairly severe relapse and resorted to homeopathic treatment which brought relief to the lesions on the scalp, neck and upper parts of the body but the condition became worse on the lower extremities and genital region. She then had treatment by methods of ancient folk-medicine (Kaviraji) but with no improvement. After some time she had a remission without any treatment and this lasted up to December 1952. Then she had another very severe relapse, and was treated by a local doctor with penicillin sodium G. crystalline 500,000 O.u. twice daily for 15 days. Finding no relief, she was once more brought to the author.

On examination the condition was as follows:

- (i) Tiny papular lesions on the scalp and the abdomen. The lesions were very itchy and on scratching began to ooze a sticky serous discharge and became painful.
- (ii) Pigmented nodules and plaques at the sides of the neck, and pea-sized lightly pigmented nodules on the upper extremities.
- (iii) Lips, tongue and mucous membrane of the mouth were covered with erythematous—squamous lesions which resembled the mucosal lesions of lupus erythematosus.
- (iv) Elephantoid condition with nodules over the labia majora.
- (v) Bluish black painful nodules mainly over the ankle joints and dorsa of the feet and plaques of different sizes on the thighs and legs. Clinically they looked like lesions of lichen hypertrophicus.
- (vi) Elephantoid condition of the extremities without pitting on pressure.

Family History.—Nothing significant was discovered.

Personal history.—She was now the mother of three children. Her menstruation had stopped for about one year after she got the disease. It started again, although irregularly, after treatment with progynon and ovocyclin. Sometimes she had menorrhagia and sometimes oligomenorrhoea. She was devoid of any sexual feeling since marriage.

General condition.—A young Hindu woman, looking quite healthy. Complexion dark, with exuberant, long, dark hair on the head. Teeth and gums healthy. The tongue coated with red, raw looking margins; lips and some portion of the mucous surfaces of the mouth were raw-red, with scales on the lips.

Liver and spleen not palpable.

Appetite, good. Bowels, usually constipated.

Cardio-vascular system, normal.

W.R. and Kahn tests negative, on three different examinations.

Respiratory system normal.

Alimentary system normal; stool examination normal.

Central nervous system normal; she complained of sleeplessness. Temperament slightly irritable.

Blood count: R.B.C. 3.2 million; Hb 65%; W.B.C. 16,800 (polys. 52%; monos. 2%; eos. 8%; lymphos. 38%). During the total period of her illness her blood had been examined ten times and the picture was as follows: Hb 65–75%. R.B.C. 3.2 to 4 million. W.B.C. 7176–16,800 (lymphos. 26 to 38%; monos. 1 to 3%; eos. 8–18%).

Histology.—The histological appearance was that of Kaposi's sarcoma. The lesion involved the corium and was characterized by abundant blood vessels and lymphatics, proliferating spindle cells and fibroblasts, and deposit of pigment (Fig. 1).

Differential Diagnosis.—In general, earlier lesions of Kaposi's sarcoma might be confused with syphilis, sarcoid and granuloma fungoides. Nodular lesions might require differentiation from angioma, angiofibroma and malignant melanoma. In later stages with the typical lesions and microscopic study, diagnosis is not very difficult.

This case showed some peculiarities in its manifestations. In the beginning, the picture was of a case of kerion. Then at one stage it looked like pemphigus vegetans. When she was seen last, the appearance of the nodules and plaques was like that of lichen hypertrophicus. Ultimately it was the biopsy report that established the diagnosis.



FIG. 1.

Treatment was as follows :

(i) Liq. arsenicalis : 5 minims twice daily, increasing by 1 minim daily for 1 week—not much impression.

(ii) Sulphapyridine, 0.5 g. 4 times a day for 3 days—no impression.

(iii) Enesol (mercury salicyl arsenate) 2 c.c. i.m. 3 times per week—there was some improvement, the itching diminished.

(iv) Mapharside 0.04 g. twice weekly intravenously. The patient showed intolerance, and it was discontinued after only two injections.

(v) Local : Hot boric compresses, 1% silver nitrate solution applied twice daily to the oozing points. 1% phenol in lotio calaminæ applied all over the surface—some relief was noted.

(vi) It was finally decided to exhibit ACTH. Treatment was started with injections of 40 units every 8 hours for one week with restriction of salt intake. This yielded remarkable results. The pain and itching completely disappeared and the oozing stopped. The nodules and plaques became flat and the only remnant was a black stain. Oedema of the whole body disappeared and the patient looked agreeably different. ACTH was continued in doses of 40 u. its twice daily for 1 week, then 20

units twice daily for 4 days, 10 units twice daily for 4 days, 10 units on alternate days for 2 weeks and finally 10 units every third day for 2 weeks. A total of 1360 units was given.

The patient appeared quite cheerful and remained absolutely normal for one month after stopping treatment. Thereafter she again got a few crops of itchy papules which cleared with a few injections of ACTH in doses of 40 units daily. She is still on ACTH and is maintaining fairly good health up till now—a period of 2 years.

SUMMARY AND CONCLUSIONS.

(1) A case of Kaposi's idiopathic haemorrhagic sarcoma is reported, the first to be recorded in India.

(2) Various types of treatment were tried with practically no effect. With sulphapyridine she remained comparatively well for about 4 years. The use of ACTH gave dramatic relief; it did not cure the condition but has certainly kept it in check.

The author is grateful to Messrs. Armour Laboratories for supplying 1000 units of ACTH free of cost. Without this it would not have been possible to carry on the treatment.

Thanks are due to Dr. Anil Chaudhuri, M.Sc., M.B., D.T.M., Director, Metropolitan Laboratory and Nursing Home Ltd., and Mr. Kanai Lal De, Technician, for their kind help in preparation of slides for histological study. Thanks are also due to Dr. K. R. Chatterjee of the School of Tropical Medicine for preparing the microphotograph.

ACRODERMATITIS ENTEROPATHICA

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SINCE the original description by Danbolt (1942, 1948), and the report by Dillaha, Lorincz and Aavick (1953) that a case of acrodermatitis enteropathica was cured by Diodoquin (diiodohydroxyquinoline), interest has been aroused in this curious condition.

The characteristics of the disease are an insidious onset in early life, between the ages of 3 weeks and 18 months, with a skin eruption that is frequently bullous and situated chiefly around the orifices. There is a loss of hair, recurrent diarrhoea and deformity of the nails. The bullous skin eruption, after a time, gives way to erythematous patches with oozing and scaling, often psoriasiform in appearance, and is situated mainly around the orifices and on the extremities. There are frequent bouts of secondary infection by both bacteria and yeasts, and in most cases there is an intermittent but progressive course ending in death. It is interesting that two of Danbolt's cases came from the same family.

The disease has been described in the literature under a number of different names, such as atypical epidermolysis bullosa, generalized moniliasis, and more recently as acrodermatitis enteropathica. The name acrodermatitis enteropathica was given to the condition because of the frequency with which skin lesions occur on the extremities and the association with gastro-intestinal disturbances. The very distinctive features allow cases to be discovered in the literature in retrospect, and about twenty cases have been reviewed by Dillaha, Lorincz and Aavick (1953).

Although most of the appearances of this condition could be caused by monilial infection, and in fact monilia can frequently be recovered from the skin in this disease, yet it seems probable that its role is one of a secondary invader only, for at times the yeast may be absent while the appearance and condition of the child is the same as when it was present. Another feature which is remarkable is the striking similarity in appearance between children having this disease; this is accentuated by the baldness and the dejected attitude of the child and is often reminiscent of Pink disease. These very distinctive features seem sufficient reason to consider this condition as a disease apart.

Hopkins (1932), and Brandt (1936), as well as Danbolt (1948) thought that acrodermatitis enteropathica was due to a deficiency of an unknown food element found in breast milk, but lacking in artificial foods, for the majority of recorded cases have occurred after the change from the breast to bottle

feeding, and in this respect the present case was no exception. The report that Diodoquin, which is scarcely absorbed at all from the gut, can benefit the condition lends weight to the theory of its gastro-intestinal origin. But no constant abnormality, either bacterial or biochemical, has been found in any case so far investigated.

CASE REPORT.

A boy aged 5, the only child of normal parents, was apparently quite normal at birth, weighing then 7 lb. 6 oz. He was breast fed for three weeks after which he was changed to bottle feeding. At six weeks a vesicular eruption appeared on the face,



FIG. 1.



FIG. 2.

forehead, neck and buttocks, occurring in crops every few days. It was thought that this was bullous impetigo, but treatment with antibiotics failed to cure it. The nails and hair were normal at this time.

The blisters continued until the age of 3 years, when they stopped and were replaced by desquamating psoriasiform lesions, with fissuring around the orifices, deformity of the nails and complete alopecia. Diarrhoea was present intermittently, and from

time to time the child became very unwell and irritable, with bouts of secondary infection of the skin. At no time since the age of 6 weeks has the child been normal.

On examination the child was underweight, miserable and irritable, hiding his head from the light and in general behaviour resembling a child with Pink disease. There was complete alopecia, and over most of the body were red desquamating lesions (Figs. 1 and 2). The hands and feet were particularly affected and the nails were deformed. The corners of the mouth were fissured, the buccal cavity showed considerable ulceration, but the teeth were normal. Apart from bouts of diarrhoea, no other abnormality was detected in the other systems by general physical examination.

Investigations.—Nikolsky's sign was negative. The stools contained a slight excess of fatty acid crystals, but no fat globules. No cysts or ova were seen. Monilia were recovered from the stools, but no pathogenic bacteria.

Bacteriological examination of the skin showed *Staphylococcus pyogenes* and monilia to be present, and monilia were recovered from the mouth.

Porpho-bilinogen (Waldenström) test and fluorescent tests for porphyrins in the urine were both negative.

Blood examination: Hb 76%; W.B.C. 9000 (neutros. 60%; lymphos. 32%; monos. 6%; eos. 2%).

Serum alkaline phosphatase, 9 King-Armstrong units; serum calcium, 11.4 mg.%. Electrophoresis of plasma proteins showed a slightly increased gamma-globulin, but otherwise the pattern was normal.

Treatment and progress.—Initially, oral doses of 210 mg. of Diodoquin were given daily, and this was increased in stages up to 600 mg. four times daily.

After a few weeks of treatment with this drug, the diarrhoea stopped, the skin improved considerably, the hair started to grow both on the scalp and the eyelashes, and the nails improved. But after two months, the skin relapsed, sterile bullae reappeared and the scaly dermatitis returned; the hair, which had reached a length of about 1½ in., began to fall out again. The diarrhoea which had always been a prominent feature hitherto did not return, however, with this relapse.

The skin has subsequently improved once more, but there is still crusting around the nostrils, photophobia, and deformity of the nails, while the scalp is covered now with short fine lanugo hairs.

The child is still very underweight and his legs are slightly bowed, but his general bearing and appearance have improved since he has been treated with Diodoquin.

This case was shown at a meeting of the Dermatological Section of the Royal Society of Medicine in April 1954.

I wish to express my appreciation to Dr. MacKenna, and to Dr. Dowling, under whose care the child now is; also to the Photographic Department of the Medical College of St. Bartholomew's Hospital for the photographs.

REFERENCES.

- BRANDT, T. (1936) *Acta derm.-venereol., Stockh.*, **17**, 513.
 DANBOLT, N. and CLOSS, K. (1943) *Ibid.*, **23**, 127.
 ——— (1948) *Ibid.*, **28**, 532.
 DILLHA, C. J., LORINCZ, A. L. and AAVICK, O. R. (1953) *J. Amer. med. Ass.*, **152**, 509.
 HOPKINS, J. G. (1932) *Arch. Derm. Syph., Chicago*, **25**, 599.

* THE TOPICAL APPLICATION OF ISONICOTINIC ACID HYDRAZIDE IN TUBERCULOSIS OF THE SKIN.

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SINCE the introduction of isonicotinic acid hydrazide in the treatment of tuberculosis, many reports have been published in connection with its oral and parenteral administration, but the literature appears to contain no reference to its use as a topical application.

Grütz (1952) administered the drug to twenty patients suffering from lupus vulgaris, tuberculosis verrucosa cutis and allied conditions with encouraging results; and Goldberg and Simon (1953) reported that two cases of lupus vulgaris responded clinically to isonicotinic acid hydrazide in doses of 4 mg. per kg. of body-weight. Further investigations of lupus, conducted by Dowling *et al.* (1953), Dowling and Seville (1953) and Sommerville and Milne (1953) have demonstrated the efficacy of treatment by the oral route. Russell and Thorne (1953) compared the results of oral administration with those of local injection in lupus vulgaris and concluded that daily injections are effective but inconvenient to the patient.

PLAN OF STUDY.

For trial in a few cases, an ointment containing 5% isonicotinic acid hydrazide ("Nydrazid") was prepared with an emulsifying base. No other form of treatment was given.

The investigation embraced two skin conditions known to be of tuberculous origin—lupus vulgaris and verruca necrogenica—and one suspected of being tuberculous—erythema induratum (Bazin's disease).

RESULTS.

Results are shown in Table I.

Of the six cases of lupus vulgaris, three were of recent origin and three were of long standing; two of the latter were relapses of previously healed lesions and the third patient had had continuous treatment with little apparent response. The three fresh cases were all confirmed by biopsy and were similar in that the face was not affected and all the lesions were raised, infiltrated and roughly circular in outline. In two cases, the lesions were situated on the

TABLE I.

Disease.	Number of cases.	New cases.		Long standing cases.		
		Apparently No. healed.		No. Quiescent.	Improved.	Worse.
Lupus vulgaris	6	3	3	3	2	1
Verruca necrogenica	3	3	3	—	—	—
Bazin's disease	3	—	—	3	—	3

buttock, and in the other they were on the forearm, just below the elbow. The duration of treatment was 8–10 weeks. All responded to treatment and, except for a blue discoloration, practically disappeared.

Both the relapsed cases responded to topical therapy and in each the condition again became quiescent. One patient developed a sensitization dermatitis to the ointment base, but this cleared under treatment with calamine and ichthammol liniment. The third case of long standing also responded to treatment and, when last seen, the area of activity was markedly reduced. Unfortunately, it was not possible to follow this case any further.

In all the cases of verruca necrogenica, the lesions were on the fingers and all were healed within seven days of commencing treatment with the Nydrazid ointment. One patient had to be admitted to hospital with extensive erythema multiforme, but this quickly regressed when the lesion on the finger began to heal.

None of the cases of Bazin's disease responded. All of the patients became worse and two deteriorated to such an extent that treatment had to be terminated suddenly.

SUMMARY AND CONCLUSIONS.

Six cases of lupus vulgaris and three cases of verruca necrogenica responded to treatment with an ointment containing 5% isonicotinic acid hydrazide. Four of the cases of lupus vulgaris were treated over a year ago and one nine months ago, and so far no signs of fresh activity have been seen. In a condition such as this the follow up has been relatively short and the favourable results are at present only provisional.

Although the number of cases is small, the results indicate that the topical use of isonicotinic acid hydrazide may have a place in the treatment of these and allied skin diseases and more extensive trials appear to be fully justified. All the cases of Bazin's disease treated in the same way became worse and the topical use of the drug in this condition may prove to be contra-indicated.

REFERENCES.

- DOWLING, G. B. and SEVILLE, R. H. (1953) *Proc. roy. Soc. Med.*, **46**, 164.
 —, WADDINGTON, E., HOWELL, R. G. and REES, D. L. (1953) *Ibid.*, **46**, 163.
 GOLDBERG, L. C. and SIMON, C. R. (1953) *J. Amer. med. Ass.*, **151**, 640.
 GRÜTZ, O. (1952) *Munch. med. Wschr.*, **94**, 1297.
 RUSSELL, B. and THORNE, N. A. (1953) *Proc. roy. Soc. Med.*, **46**, 165.
 SOMMERVILLE, J. and MILNE, J. A. (1953) *Proc. roy. Soc. Med.*, **46**, 168.

ROYAL SOCIETY OF MEDICINE.

SECTION OF DERMATOLOGY.

President—Dr. REGINALD T. BRAIN.

21 October 1954.

Psoriasis and Lupus Erythematosus.—Dr. S. P. HALL-SMITH.

Mrs. L. H—, aged 32.

History.—Nine years ago, after birth of first child, eruption of face; this cleared but recurred during second pregnancy five years ago, when trunk lesions first appeared. In hospital at that time and again two years ago for duodenal ulcer. The hands were first affected about eighteen months ago. She has been under my care for six months.

Family history.—Brother stated to have psoriasis, otherwise nil relevant.

On examination.—Small slightly built woman. Weight 6 st. 2 lb. Scaly psoriasiform patches of scalp which have now largely cleared.



FIG. 1.

Face : Skin clear, though at onset L.E.—like pink patches below both eyes.

Trunk : 10 in. diameter atrophic pink lichenoid plaque separated from brown scaly periphery by deeply pigmented verrucose ridge covering abdomen. A similar circular plaque 8 in. diameter covers the lower back. (Figs. 1 and 2.)

Limbs : Rough, thickened patches over knees and elbows, though elbow lesions have now largely cleared; fingers of both hands show extensive pink atrophic L.E. type changes. Marked dystrophy of all nails of fingers and toes.

Investigations.—9 September 1954 : E.S.R. 19 mm. in one hour (Wintrobe).

Serum proteins.—Albumin 4.4% ; globulin 1.6% . A/G Ratio 2.7/1.

Haemoglobin 19.6 gm.%. Red blood cells 4,100,000 per c.mm. Colour Index 1.0. Leucocytes 4000 per c.mm. Polymorphs 77% ; eosinophils 1% ; lymphocytes 18% ; monocytes 4%.

No L.E. cells found in the peripheral blood.

Histology (Dr. H. Haber) 1 December 1954 : The epidermis shows hyperkeratotic acanthosis with a marked round-cell infiltration of the upper corium. Many chromatophores heavily laden with melanin are also seen. A few vessels show dilatation of their lumina and engorgement. Neither lichen planus nor lupus erythematosus can be diagnosed on histological evidence.

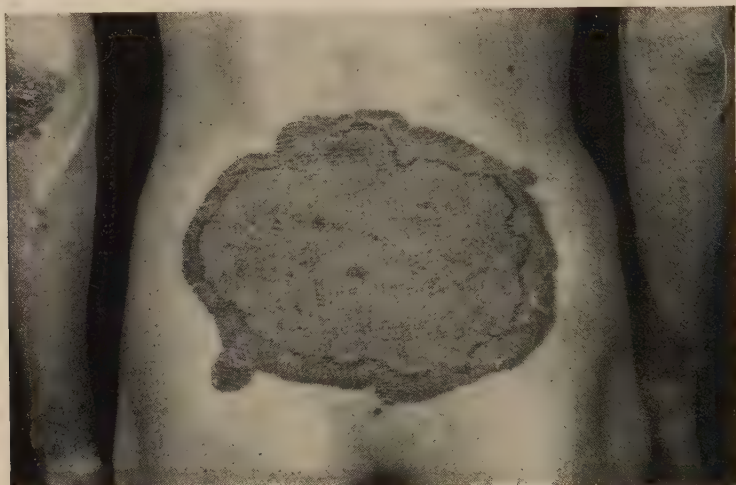


FIG. 2.

Treatment and progress.—Her general condition has greatly improved and the lesions are much less florid than when I first saw her six months ago. Her abdominal and back lesions show signs of resolution, and are now pigmented. Treatment consisted of mepacrine for the first four months with development of pigmentation and spiny lesions over the neck, legs and arms. For the past six weeks she has been receiving Chloroquin 150 mgm. *b.d.* and vitamin A concentrate 24,000 units *t.d.s.* She has also received local applications for the psoriasiform patches.

Dr. G. B. DOWLING : I suggest that there is support for a diagnosis of lichen planus.

Dr. B. C. TATE : I saw neither lupus erythematosus nor psoriasis. There were areas suggesting ordinary lichen planus, others suggesting hypertrophic lichen planus and still others atrophic lichen planus.

Dr. B. SCHWARTZ : This case is rather similar to one I showed some time ago which has been seen by members on three occasions. The case was first shown as "lupus erythematosus with lichenoid lesions" which were considered possibly to be due to treatment with gold. The patient was then shown by Dr. Gold at the Tenth International Congress as "lupus erythematosus with hypertrophic lichen planus." On the third occasion he was again brought here with the diagnosis "lichen planus-psoriasis". There was histological support for the changes in diagnosis on each occasion.

The patient subsequently went into a stage of severe exfoliation and was treated with ACTH, and this was by far the best of the many treatments tried. Unfortunately ACTH had to be stopped because of haematemesis. It might help Dr. Hall-Smith's patient.

There is one further point of interest. My patient was found to have an enlarged liver which, on biopsy, showed histological findings compatible with a reticulosis.

As regards the case under discussion I would put this patient in a lichen planus phase today.

REFERENCES.

SCHWARTZ, B. (1951) *Proc. R. Soc. Med.*, **44**, 877.

GOLD, S. C. (1953) *Proceedings Tenth International Congress of Dermatology*, London: British Medical Journal, p. 503-5.

SCHWARTZ, B. (1953) *Brit. J. Derm.*, **65**, 284.

Dr. I. B. SNEDDON said that, judging by the photographs, the disease looked like psoriasis when it started and it had then become more like lichen planus. It was possible that the psoriasis had appeared as a Koebner phenomenon since there was a family history of psoriasis.

The following cases shown have been published in *Proc. R. Soc. Med.*, **48**, 173.

Miescher's Granulomatosis with Mediastinal Gland Enlargement.—Dr.

R. J. CAIRNS.

A Rare Variety of Squamous Cell Carcinoma.—Dr. E. J. MOYNAHAN.

Fungus Infection.—Dr. R. H. MEARA.

The following cases also were shown.

Favus (Two Cases).—Dr. P. J. FEENY.

Phagedaena Geometricum (Brocq).—Dr. P. J. HARE.

Poikiloderma Atrophicans Vasculare.—Dr. C. D. CALNAN.

Orf.—Dr. E. C. M. JOHNSTON (for Dr. E. W. PROSSER THOMAS).

OBITUARY.

DR. H. W. BARBER.

HAROLD WORDSWORTH BARBER was born in 1886 at Nottingham, the son of a solicitor of that city. He was educated at Repton School and at Cambridge University, entering Clare College as a Scholar in Natural Science and leaving with a First Class Natural Science Tripos. He went to Guy's Hospital in 1908 and qualified in 1911. In 1912 he was awarded the Arthur Durham Travelling Scholarship and for a year he studied dermatology in Paris and with Unna at Hamburg. He liked and admired the French, whose language he spoke fluently, and for his teacher Darier especially he formed a deep and permanent attachment. From 1913 to 1915 he was a medical registrar at Guy's Hospital, thereafter serving in various parts of the world in the R.A.M.C. for the remainder of the Great War. He returned to Guy's Hospital in 1919 as a medical registrar and towards the end of that year he was appointed Physician in Charge of the Department for Diseases of the Skin. Since 1850 the care of diseases of the skin had been given to a succession of general physicians which included such great figures as Addison, Gull, Hilton Fagge, Pye Smith, Samuel Wilks, and finally Cooper Perry, upon whose advice Barber had decided earlier to adopt dermatology as his career.

Barber matched his illustrious predecessors in possessing outstanding qualities of mind and personality. He had been a very impressive medical registrar at a time when his generation at Guy's Hospital was rich in talent and in those days the Arthur Durham Scholarship was usually awarded to those who were expected in due course to be appointed to the senior staff. He began to contribute to dermatological literature during the latter part of the Great War and his writings attracted immediate attention. Indeed, he soon began to dominate thought in British dermatology and this he did by thinking, teaching and writing in terms of broad concepts of aetiology and pathogenesis. Equally, he was endowed with an exceedingly accurate and retentive visual memory, and he probably knew as much about the morphological aspect of dermatology as anyone living. To the end of his days he commanded rapt attention whenever he spoke at meetings: his distinguished features and bearing and his ability to express his thoughts with remarkable clarity will be ever remembered, and will be sadly missed by his colleagues.

He was President of the Section of Dermatology of the Royal Society of Medicine in 1935-36, and 1936-37, and of the British Association of Dermatology and Syphilology in 1944 and 1945. In 1929 he delivered the Lettsomian Lectures on The Relationship of Dermatology to other branches of Medicine, and in 1952 the Prosser White Oration, in which he depicted in outline the ideas and principles which had guided him through his professional career. In this Oration, while expressing his great appreciation of the modern urge to seek exact knowledge by controlled experiment and statistical analysis, he advanced the plea that the art of the great clinicians should never be allowed to wane. No one has any doubt that he is numbered among those whose art he so greatly admired.

Barber earned and won the unbounded admiration and affection of his colleagues as well as of a great number of other people with whom his life brought him into contact. His appearance and bearing were aristocratic; his outlook, both romantic and firmly conservative, was reflected in the elegance of his home, his charm as a host, his taste in reading and in the theatre, the beauty of his garden at Hampstead, and his attachment to great institutions, especially his University and the Hospital

whose great clinical tradition he upheld so ably. He often criticized the views of others, or regretted a lack of them, but he never spoke unkindly of anyone, apparently crediting the rest of mankind with his own breadth of outlook and generosity.

His tastes were in some respects sophisticated, for example in wine and food about which he knew everything, in others very simple. He loved cricket and knew all the cricketers and their performances from the distant past as well as any school-boy. He followed the fortunes of his apparently talented but often disappointing County, and in the early days he also noted regretfully the defects in the Forest and County football sides. In those days also he liked Phillips Oppenheim and other good story writers of the time. Later he became a race-goer and a keen bird watcher. He enjoyed travelling in good trains, and when, some few years before his retirement from the staff of Guy's Hospital, he left Hampstead to live at Brighton he certainly found the journey to and from London no hardship.

With his great erudition, his enthusiasm and outstanding personal attractiveness it was natural that Barber should attract to himself a large body of students of all ages who thought that he was quite incomparable. The same qualities brought him an almost overwhelming practice with its attendant responsibilities and unrelenting hard work. He worked far too hard all his life and he died far too young, but he will always live in the minds and hearts of those who knew him and in the memory of all as a great figure in British dermatology.

G. B. D.

CURRENT LITERATURE.

RENAL IMPAIRMENT DUE TO SARCOID INFILTRATION OF THE KIDNEY. K. W. BERGER and A. S. RELMAN. (1955) *New Eng. J. Med.*, 252, 44.

A case of generalized sarcoidosis with renal damage is reported. Hypercalcaemia was not present, but sections of biopsy material revealed extreme sarcoid infiltration of the kidney. Treatment with cortisone improved the renal function and the state of the patient generally, but the infiltration in the kidney was unchanged. A. D. P.

AN UNUSUAL CASE OF CUTANEOUS BLASTOMYCOSIS. J. G. DOWNING and D. W. FOLAN. (1955) *New Eng. J. Med.*, 252, 103.

A case of re-infection of the skin with *Blastomyces dermatitidis* after an interval of twenty-two years is reported. The re-infection responded to iodides. A. D. P.

OCCURRENCE OF THE L.E. PHENOMENON IN A PATIENT WITH A SEVERE PENICILLIN REACTION. A. M. PAUL. (1955) *New Eng. J. Med.*, 252, 128.

The finding of L.E. cells in a patient with a severe penicillin reaction who did not have systemic lupus erythematosus is reported. The author considers that the L.E. phenomenon is probably due to an immunological mechanism. A. D. P.

SYMPOSIUM ON PIGMENT AND PIGMENT TUMOURS. BIOCHEMICAL BASIS OF HUMAN MELANIN PIGMENTATION. THOMAS B. FITZPATRICK and AARON BUNSEN LERNER. (1954) *Arch. Derm. Syph., Chicago*, 69, 133.

HISTOGENESIS AND CLINICOPATHOLOGICAL CORRELATION OF NAEVI AND MALIGNANT MELANOMAS. ARTHUR C. ALLEN and SOPHIE SPITZ. (1954) *Arch. Derm. Syph., Chicago*, 69, 150.

MANAGEMENT OF PIGMENTED NAEVI. SAMUEL B. FRANK. (1954) *Arch. Derm. Syph., Chicago*, 69, 172.

The first paper shows that melanin is formed only in melanocytes, derived presumably from the neural crest, by a tyrosine-tyrosinase reaction controlled by naturally occurring sulphhydryl compounds in the epidermis. Inhibition of melanin formation follows the ingestion of two sulphur-containing compounds, thiouracil and BAL. Locally applied parahydroxyphenyl derivatives (including mono-benzyl ether of hydroquinone) can cause depigmentation. The pituitary gland probably takes a part in the regulation of melanin formation. Pigmentary disturbances are associated with relative deficiency of tyrosine as in phenyluria or absence of tyrosinase in melanocytes as in albinism.

The second paper discusses the classification of naevi and melanomas, and the authors give their reasons for rejecting the theory that melanocytes are derived from the neural crest. They also discuss the prognosis in various forms of malignant melanomas.

The author of the third paper considers that the treatment of naevi showing no malignant changes depends on the individual case and the experience of the physician. Pigmented naevi which show definite or even suspicious evidence of malignant change must be dealt with by radical surgery. The intelligent use of biopsy is an important factor in assessing the treatment required.

J. K.

NODULAR GRANULOMATOUS PERIFOLLICULITIS OF THE LEGS CAUSED BY TRICHOPHYTON RUBRUM. J. WALTER WILSON, ORDA A. PLUNKETT and AVIS GREGERSEN. (1954) *Arch. Derm. Syph., Chicago*, 69, 258.

The authors describe 14 cases occurring in women in California. They consider this condition closely resembles Majocchi's trichophytic granuloma but point out that the location and distribution of the disease and the causative organism are different as is the tendency to be unilateral.

J. K.

CONTRIBUTIONS OF EXPERIMENTAL ANIMAL RESEARCH TO DERMATOLOGY. J. LAMAR CALLAWAY and GEORGE W. HAMBRICK, JR. (1954) *Arch. Derm. Syph., Chicago*, **69**, 278.

An extensive review of the important results animal research has given to dermatology. The bibliography extends to 210 items, mostly from *Arch. Derm. Syph., Chicago* and *J. invest. Derm.*
J. K.

LOCALIZED CHROMIDROSIS: A SURVEY. WALTER B. SHELLEY and HARRY J. HURLEY (1954) *Arch. Derm. Syph., Chicago*, **69**, 449.

After a review of the literature the authors describe chromidrosis of the face in a woman aged 29. They consider it is a disease of apocrine glands either normally or abnormally situated. Pure apocrine sweat, produced experimentally by local injection of epinephrine into the axillae of 100 men, showed chromidrosis in 11 cases. The abnormal sweat showed pigment granules possessing the properties of the lipofuscin pigment group, the colour depending on the degree of oxidation. Chromidrosis is not uncommon but is seldom clinically apparent as apocrine sweat is normally produced in small amounts and is well diluted by eccrine sweat.
J. K.

PHYSICAL DIMENSIONS OF THE SKIN: DETERMINATION OF THE SPECIFIC GRAVITY OF SKIN, HAIR AND NAIL. MORRIS LEIDER and CONSTANCE MILLETTE BUNCKE. (1954) *Arch. Derm. Syph., Chicago*, **69**, 563.

Not only the specific gravity but the surface area, thickness, volume and weight of the human skin are given.
J. K.

EXFOLIATIVE DERMATITIS: ITS ETIOLOGY AND PROGNOSIS. HAROLD T. H. WILSON. (1954) *Arch. Derm. Syph., Chicago*, **69**, 577.

Most of the 50 cases presented resulted from the generalization of a pre-existing skin disease. Only 4 patients were proved to be suffering from a reticulosis. Recoveries numbered 28, 19 died and 3 remained unchanged.
J. K.

THE MELKERSSON-ROSENTHAL SYNDROME. J. PIERARD and J. MAGE. (1954) *Arch. belg. Derm. Syph.*, **10**, 1.

The authors discuss this condition at length and detail a case showing the typical triad of recurring facial paralysis, localized oedema of the face and scrotal tongue. They consider this syndrome different from Mischer's macrocheilia.
J. K.

CONTRIBUTION TO THE STUDY OF KERATOACANTHOMA. S. LAPIERE. (1954) *Arch. belg. Derm. Syph.*, **10**, 185.

A dozen cases are summarized including that of a child aged 16 months, seen some years ago and accepted by the Society then as a case of squamous cell epithelioma, a case with multiple lesions extending over a period of 25 years, and two cases with lesions on the covered parts of the body. The author has seen no instance of malignant degeneration in spite of simple treatment—slicing the tumour off and cauterising the base—or no treatment at all.
J. K.

EHLERS-DANLOS SYNDROME. L. H. JANSSEN. (1954) *Arch. belg. Derm. Syph.*, **10**, 251.

In a study including electron microscopy of the collagen and elastin in normal and abnormal skin it was found that the shape of isolated fibrils was identical. The syndrome can be explained as an anomaly in the way the fibrils are built into the collagen meshwork of the skin, ligaments and joint capsules.
J. K.

CONTRIBUTION TO THE SYMPTOMATOLOGY OF CUTIS VERTICIS GYRATA AND ITS RELATIONSHIP TO OTHER CONGENITAL ABNORMALITIES. G. WEBER. (1955) *Derm. Wschr.*, **131**, 49.

Report of a case showing pronounced abnormal skin folds in the region of the forehead and neck, first noticed at the age of 30, and radiological abnormalities of the skull.

The absence of telangiectatic oedema, mental retardation and cutis laxa rule out a diagnosis of Bonnevie-Ullrich syndrome. This syndrome is more closely related to Ehlers-Danlos disease as muscular hypotonia, hyperflexibility of joints and pluriglandular insufficiency are common to both. Dermatosclerosis is characterized by pendulous skin, whereas in this case the folds stand out

in relief from the natural surface of the skin. The case would appear to be one of cutis verticis gyrata of abnormal localization and late development. X-ray abnormalities of the skull, such as a low sella turcica and poor development of the frontal sinuses would be points in favour of a congenital defect.

W. G. T.

CONTRIBUTION TO THE PROBLEM OF MONILIASIS. J. KONRAD and A. WINKLER. (1955) *Derm. Wschr.*, **131**, 73.

Candida albicans occupies a special position amongst fungus infections, as the organism is present frequently as saprophyte and only occasionally becomes pathogenic.

There has been a recent increase in the incidence of disease caused by this organism which cannot be explained entirely by the increased use of antibiotics, as it also occurs in patients who never had these substances. There may have been an increase in the degree of pathogenicity which would explain the occurrence of extensive and parenchymatous forms of the disease.

A severe case of chronic moniliasis, present for sixteen years, and affecting lips, tongue, buccal mucosa and palate is described.

On the occasion of a second admission for boils, treatment with penicillin produced a severe local flare-up together with angioneurotic oedema of the face and later oedema of the larynx. Group sensitivity to fungal antigens explains this occurrence.

In histological preparations the presence of staphylococci along the mycelia was thought to be more than a coincidence, and might be the explanation of the chronicity and resistance to treatment of this condition. A similar state of affairs has been described in human actinomycosis.

W. G. T.

SUCCESSFUL TREATMENT WITH AUREOMYCIN AND TERRAMYCIN AS A CONTRIBUTION TO THE EXPLANATION OF THE ACTION OF PENICILLIN IN ACRODERMATITIS ATROPHICANS. E. LUDWIG. (1955) *Derm. Wschr.*, **131**, 169.

After a discussion of the papers on penicillin treatment of acrodermatitis atrophicans 11 case histories are given. These cases were treated with an average total dose of 20 gm. of either aureomycin or terramycin. Marked improvement occurred in 9 of the 11 cases either during or shortly after treatment. These results, in conjunction with the report of the efficacy of chloromycetin reported by Goetz, are taken to prove that the action of penicillin is an antibiotic one and not a side-effect on the vegetative nervous system.

W. G. T.

ON KAPOSI'S VARICELLIFORM ERUPTION. A. BERGMANN. (1955) *Derm. Wschr.*, **131**, 178.

Only 180 cases of this condition have so far been published, 60 in the German literature. Cases are usually met with in infants and only a few have been reported in adults. Cases which occurred during mass vaccinations, such as during the New York and Glasgow epidemics, should not be included.

A case of Kaposi's varicelliform eruption occurring in a girl of 15 with a personal and family history of eczema is reported.

Inoculation of a rabbit's cornea with serum from a lesion produced a conjunctivitis. The secretion was transferred on to a cornea of a second rabbit, causing once more a reaction. After healing inoculation of the same eye with cow-pox lymph was carried out without producing a reaction. Corneal tissue from the first rabbit produced a reaction in a third, but after healing renewed inoculation with material which had been preserved did not produce a reaction.

The explanation is either that there is a crossed immunity between herpes and cow-pox virus, or that the case was caused by the cow-pox and not the herpes virus as was assumed.

W. G. T.

CUTANEOUS CARCINOMA IN THE ZWICKAU SKIN CLINIC. R. FRÜHWALD. (1955) *Derm. Wschr.*, **131**, 104.

An analysis of 128 cases of carcinoma of the skin and mucuous membranes. Of these 69 cases occurred in women mostly between 60 and 80. Of those confirmed by biopsy, 29 were basal celled and 22 squamous. In 55 cases there was a single lesion, in 14 they were multiple.

The 59 men belonged to the same age group. Of 41 cases investigated histologically 24 were basal celled, 14 squamous and the remainder mixed celled.

Treatment was with Chaoul's technique. Recurrences were observed in 4 men and 5 women. In two cases x-rays were entirely ineffective and the patients died. Two patients died of intercurrent diseases and 4 more died after extensive x-ray therapy.

W. G. T.

RADIOACTIVE COBALT IN SKIN TUMOURS AND THE USE OF RADIOACTIVE THREADS IN CAVERNOUS HAEMANGIOMATA NEAR THE EYE. H. J. ENDRES (1955). *Derm. Wschr.*, 131, 145.

Becker and Scheer in 1950 developed an easily moulded mass containing cobalt which they also used in the treatment of dermatological conditions. The substance at first contained cobalt in powder form, but later it was enclosed in plastic balls, 2 mm. in diameter. The therapeutic activity of radioactive cobalt depends on gamma radiation. Compared with radium the initial cost is negligible. It provides us with a material that can easily be applied to large surfaces and in difficult locations. The mass, enclosed in cellophane, can be attached with strapping. The activity of the preparation should be checked with a Siemens gamma-meter.

The treated material consists of basal and squamous celled tumours, cavernous haemangioma and melanomata, usually of such nature that other forms of radiation therapy were inappropriate. The dosage varied between 2500 and 4000 r given in one or two sittings. In the case of melanomata at least 8000 r were given and cavernous haemangioma received up to 900 r in divided doses.

Reference is also made to the treatment of cavernous haemangioma in the vicinity of the eye by means of a radioactive thread. An absorbable thread of collagen material impregnated with radioactive phosphorus is introduced into the lesion. Beta-radiation is exhausted some time before the thread is absorbed.

W. G. T.

THE MEDICO-LEGAL POSITION OF "EXOGENOUS" LICHEN PLANUS. W. HOF. (1955) *Derm. Wschr.*, 131, 151.

The question of the possibility of external factors causing lichen planus may be worth while discussing as it is sometimes necessary to give opinions for medico-legal purposes. In view of the fact that the aetiology of this condition is still uncertain this cannot cause surprise. The infectious theory (Lassar, Hallopeau, Jadassohn) has not yet been proved. Lenhoff's "spirochaetes" are probably artefacts (Touraine). Recent histological investigations by Ormea are a revival of the neural theory (Polotebnoff, Köbner, Fox) and require further study.

A case of lichen planus occurring in a woman 3 days after first wearing a new elastic suspender belt is reported. The patient blamed "poison" contained in the material for her rash.

Though there is a good deal of support for a mechanical causation of lichen planus in the literature the suggestion of chemical factors is rare. Cases have been reported after sulphur baths, chrysarobin and copper sulphate.

Skin tests with both rubber and covering textile material were negative in this case.

The author is inclined to think that mechanical irritation can produce lichen planus in individuals suitably predisposed to the condition by insufficiently understood factors.

W. G. T.

SCHÖNLEIN'S PURPURA WITH CIRRHOSIS OF THE LIVER AND ITS DIFFERENTIATION FROM "PURPURA HYPERGLOBINAEMICA." G. W. KORTING and W. ADAM. (1955) *Derm. Wschr.*, 131, 122.

Since Henoch it has been known that Schönlein's purpura may be accompanied by renal and intestinal manifestations. Less is known about disturbances of the liver and of the serum proteins. Investigation of the literature supports the view that typical Schönlein's purpura and Waldenström's "purpura hyperglobinaemica" are identical. Electrophoretic examination of the serum protein shows that this type of disease shows mainly an increase of gamma 2 globulin, whereas Schönlein's purpura occurring in cirrhosis of the liver shows an increase in both gamma 1 and gamma 2 globulin and should for this reason be separated from the former condition. In a patient with cirrhosis of the liver accompanied by Schönlein's purpura percutaneous test with heparin produced a typical local Schönlein manifestation. Since Degos and Cortenot stated that the mast cells of the liver, which produce and store heparin, are increased in cirrhosis, it is claimed that heparin is the endotoxin which produces the typical eruption in patients whose peripheral blood vessels are capable of reacting to this stimulus.

W. G. T.

HISTOLOGICAL INVESTIGATION OF THE SKIN IN ANGIOKERATOMA CORPORIS DIFFUSUM, WITH PARTICULAR REGARD TO THE ASSOCIATED DISTURBANCE OF PHOSPHATID METABOLISM. M. RUITER. (1954) *Dermatologica*, 109, 273.

Some eight years ago the author observed three brothers with angiokeratoma corporis diffusum. One died, and there was found a deposition of a substance, which was not at first determinable,

in the muscle of the heart and blood-vessels. On the death of the second brother the author was able to test the statement, since published by a pathologist for an identical case, that it was a case of lipoid metabolic disturbance. In fact, it has been possible to find storage of lipoids in heart and aorta, and by means of a finer technique the cutaneous blood-vessels were specially investigated, and the deposition of a lipoid substance was shown in all the vessels down to the capillaries. From this he concludes that there is a direct connection between the genesis of the skin changes and the lipoid metabolism, and this explains the general efflorescence in angiokeratoma corporis diffusum. This syndrome can thus be differentiated from the other kinds of angiokeratoma both on clinical-morphological and on pathogenetical grounds.

J. F. S.

TREATMENT OF LYMPHOGRANULOMATOSIS MALIGNA (HODGKIN-STERBERG) WITH ACTINOMYCIN-C. H. O. JOHNE and A. KROHER. (1954) *Dermatologica*, 109, 286.

Report of a case of Hodgkin's disease, with non-specific eruption, intense and intractable itching and large gland-masses, which were refractory to a range of other treatments but responded to a course of the new antibiotic and cytostatic agent, Actinomycin-C (Sanamycin, Bayer). The patient had been symptom-free for about eight months at the time of reporting. It is thought possible that the simultaneous administration of penicillin and streptomycin may have contributed to the result, and the authors suggest that the possible synergism of antibiotics and cytostatics is worthy of further investigation.

J. F. S.

LICHEN MYXOEDEMATOSUS (MUCINOSIS PAPULOSA CUTIS). H. HAMMINGA and F. J. KEUNING. (1954) *Dermatologica*, 109, 86.

A 55-year-old woman showed a skin affection which had developed over ten years. It consisted of numerous disseminated papules. The clinical picture resembled lichen moniliformis. Histologically, the papules were circumscribed deposits of a substance giving positive reactions with mucicarmine, so that a mucin-like substance was concerned. Histochemically, the nature of this substance could not be more closely determined. The microscopic picture resembled that of lichen myxoeдематосus. Hormonal disturbances, especially of the thyroid, were not evident on investigation. For some days gangrene of the right hand had developed, and livedo racemosa was also present. The authors consider it possible that the vascular changes and the skin condition have a common factor in some alteration of the ground-substance of the connective-tissue.

J. F. S.

ATTEMPTS TO INACTIVATE ECZEMATOGENOUS SUBSTANCES IN INDUSTRY. G. RAJKA and E. VINCZE. (1954) *Dermatologica*, 109, 93.

The authors have tried to find substances effective in preventing sensitization of the skin by factors occurring in various occupations. They have sought substances giving a chemical rather than a mere physical protection. The efficacy of such substances was judged by their influence on the epicutaneous test. The present report gives the results of such tests in chromium and turpentine dermatitis. For the former, protection was attempted with a reducing substance, especially ascorbic acid, and for the latter with an oxidation-inhibiting substance—dimethylaniline. Individual results show that, at least theoretically and experimentally, such a protection is possible, but no practical measures can yet be given.

J. F. S.

THE EOSINOPHILIC REACTION OF THE SKIN. A. VUKAS. (1954) *Dermatologica*, 109, 106.

In patients suffering from various types of skin disease, blisters were raised artificially on areas of diseased skin and on corresponding, contralateral areas of healthy skin. The cells in these blisters were counted, with special regard to the eosinophils, and some interesting differences observed. Simultaneously, differential blood-counts and histological examinations of the skin under the blisters were carried out, also with special regard to the eosinophils. The differences in the numbers of eosinophils showed that their number in the blisters is not dependent on their number either in the blood or in the skin.

J. F. S.

VITAMIN E IN THE TREATMENT OF CERTAIN ALLERGIC STATES. I. DAINOW. (1954) *Dermatologica*, 109, 112.

The author recommends the administration of vitamin E to women who suffer relapses of urticaria or eczema regularly at the onset of menstruation. Vitamin E has a regulating effect on the hormone system, and may thereby suppress these exacerbations.

J. F. S.

FOLLICULAR LYMPHOMA OF THE SKIN. J. O'D. ALEXANDER and T. PASIECZNY. (1954) *Dermatologica*, 109, 1.

Four cases of follicular lymphoma of the skin are presented. Two distinct clinical types are described. The first type, which occurs principally on the face and neck, exhibits multiple, infiltrated, brownish papules. These lesions often itch, and are frequently associated with photosensitivity. The second type consists of solitary, elevated tumours, up to 2 or 3 centimetres in diameter, occurring on the face, the ear lobes, forearm or scrotum. The first type heals without scar formation, but the second may leave a scar. Histologically, in the first group there are characteristic, sharply circumscribed masses of reticulum and lymphoid cells, which have a lymphoid follicular arrangement, often showing germinal centres. The second type shows a diffuse infiltration of cells of a similar nature, with occasional lymphoid follicular arrangement. Both types are remarkably sensitive to roentgen-ray therapy—a dosage of 350 r, at 100 kV, 5 ma., and 25 cm. target-skin distance, unfiltered, being sufficient to cause regression. Comparison is made between this condition and Brill's disease. Both diseases show follicular arrangement of cells, and a characteristic arrangement of reticulin fibres in the follicular cell masses. It is possible that the two conditions may be related. Because of the follicular arrangement and the presence of large numbers of reticulum cells as well as lymphocytes, the term follicular lymphoma of the skin is preferred to lymphocytoma cutis.

J. F. S.

GRANULOMA GANGRAENESCENS. X. VILANOVA and J. PINOL. (1954) *Dermatologica*, 109, 14.

Report of a case of the disease first described by Kraus in 1929 under the above title. The 59-year-old woman had from her right nostril and her naso-pharynx a widespread, progressive ulcerous, decomposing, non-neoplastic infiltration, which after a temporary remission from roentgen-therapy, finally led to death. All aetiological tests were negative. The clinical picture is still best regarded as an independent disease of unknown aetiology.

J. F. S.

A BRIEF NOTE ON PSEUDOTINEA INTERDIGITALIS PEDUM. A. CASTELLANI. (1954) *Dermatologica*, 109, 21.

On the basis of four cases observed by the author, he draws attention to an interdigitally localized hyperkeratotic dermatosis, which at first sight looks like a foot mycosis, but in which no fungus can be shown, and antimycotic therapy has no result. The aetiology is unknown.

J. F. S.

THE TREATMENT OF IMPETIGO AND SYCOSIS BARBAE WITH DICHLOROXYQUINALDINE.

E. L. COHEN. (1954) *Med. Pr.*, 231, 433.

Six patients with impetigo contagiosa, 3 with Bockhart's impetigo, 1 with impetigo pityroides, 7 with sycosis barbae and 3 with "seborrhoeic sycosis" were treated with an ointment containing 3% 5,7-dichloro-8-hydroxyquinaldine (Steroxin) in an emulsion base.

The initial results were good in impetigo contagiosa and uncomplicated sycosis barbae, but final healing was rather slow. No case of sensitization of the skin has been found.

H. R. V.

CHILBLAINS AND OTHER CIRCULATORY DISORDERS OF THE EXTREMITIES. H. WILSON. (1955) *Med. Pr.*, 233, 141.

Chilblains are due to the action of cold on the skin, and in spite of modern vaso-dilating drugs the only satisfactory treatment is prophylaxis.

H. R. V.

THE PLACE OF RADIOTHERAPY IN THE TREATMENT OF NON-MALIGNANT CONDITIONS.

G. BODEN. (1955) *Med. Pr.*, 233, 32.

In addition to skin disease, the place of radiotherapy is discussed in diseases of bones and joints, diseases of the eye, central nervous system, glands and in gynaecological disorders.

With regard to skin disease, stress is very properly laid on the dangers of indiscriminate radiotherapy.

H. R. V.

ACNE VULGARIS. H. J. WALLACE. (1954) *Med. Pr.*, 232, 419.

The current views on aetiology and treatment of acne vulgaris are given, but the author's views can be given best by quoting his concluding paragraph: "Little advance in treatment has been made in recent years to parallel the progress in research as to the cause of acne. Treatment,

therefore, remains unsatisfactory. No cure is yet available to rectify this disorder of physiology which results in pathological changes. Rapid results cannot be expected but considerable amelioration will be achieved by persevering with the treatment described. Most of the treatment has to be continued for a long period, in fact, until spontaneous remission occurs."

H. R. V.

WEBER-CHRISTIAN DISEASE—RELAPSING FEBRILE NODULAR NON-SUPPURATIVE PANNICULITIS. S. GOLDIN. (1954) *Med. Pr.*, 231, 480.

A case of this condition is described and an analysis made of 110 other cases reported.

The points particularly considered in this analysis are age of onset, duration, sex, distribution of nodules, clinical picture and outcome, blood picture and response to treatment.

Suppuration occurred in 21% of these cases and it is suggested that the term "non-suppurative" be dropped from the title.

H. R. V.

TREATMENT OF APHTHOUS ULCERS OF THE MOUTH. W. B. BALDERSTON. (1954) *Med. Pr.*, 232, 385.

Many cures have been advocated for this common and disturbing complaint but none have stood the test of time.

This article reports cure of all but one of 15 patients with Aureomycin troches 15 mg. The lozenge is kept between the teeth and the cheek as near to the ulcer as possible and is allowed to dissolve, without sucking. This may take 1 to 1½ hours and as soon as one is finished another is inserted, continuing this for a minimum of 24 and a maximum of 48 hours.

After three or four attacks have been aborted in this way, the intervals between the attacks became progressively longer in about half the cases investigated.

H. R. V.

BASAL-CELL CARCINOMA (RODENT ULCER) AND ITS TREATMENT. C. P. G. WAKELEY. (1954) *Med. Pr.*, 232, 395.

The various types of rodent ulcers are listed and as a result of his personal experience of over 300 cases the author concludes that the best treatment for all basal-cell cancers is surgical excision.

With radiotherapy the recurrence rate is consistently 5%, whereas following adequate excision there should be no recurrence.

H. R. V.

THE SURGICAL TREATMENT OF SKIN CANCER. C. R. McLoughlin. (1954) *Med. Pr.*, 232, 23.

Before discussing surgery for skin cancers the author stresses the fact that the modern result of expert radiotherapy for carcinomas of the skin which have been recognized early are impressive; the "cure" rate is high and the cosmetic results are good.

It is with this established fact that all selection of cases for surgery must be correlated. Once operation is decided upon the surgeon must always be radical in the excision since the ideal at which the plastic surgeon aims is to be competent to repair any defect which the exigencies of the operation create. Selection of patients and methods of repair are listed.

H. R. V.

THE TREATMENT OF PLANTAR WARTS. D. I. McCallum. (1954) *Med. Pr.*, 232, 85.

The great majority of plantar warts respond satisfactorily to the well-tried methods, but in dealing with these nothing should be done which might subsequently weaken the skin of the foot by injuring the deeper tissues.

Methods given are soaking in formalin, occluding with "Elastoplast", carbon dioxide snow, curettage, x-ray therapy and the use of salicylic acid ointments and paints.

H. R. V.

SARCOIDOSIS AND THE KVEIM REACTION. F. J. ROGERS and J. R. HASERICK. (1954) *J. invest. Derm.*, 23, 389 and 502.

This beautifully constructed paper contains, besides much useful general information about the Kveim antigen, an exhaustive description of the histological changes seen at various stages in the development of the reaction, and a discussion of the pathogenesis of the disease as thereby revealed. For the authors believe that the papule that develops at the site of a positive Kveim test is in fact a lesion of sarcoidosis.

The test, they find, is reliable subject only to confirmation by histology of the 6-weeks-old papule. In their series of 103 patients they had no false positives, only 4 false doubtful positives and 2 false negatives.

J. H. T. D.